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# CONTINUITY AND CHANGE IN THE CDEP SCHEME

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Centre for  
Aboriginal Economic  
Policy Research  
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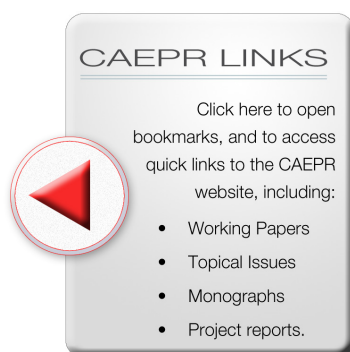
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## Abstract

The Community Development Employment Projects (CDEP) scheme is an example of a program that combines community development and labour market program elements. This paper describes the nature of CDEP employment in 2008 and the extent to which it changed between 1994 and 2008. The paper also compares a selection of economic and social outcomes of CDEP participants with those of persons who are employed outside of CDEP, unemployed, and not-in-the-labour-force (NILF) in 2008, and the extent to which these associations changed between 1994 and 2008.

The analysis shows that the nature of the jobs in which CDEP participants work and the experiences it provides to workers has been largely unchanged, despite substantial changes in underlying policy settings. The income gap between CDEP participants and the non-CDEP employed has increased since 1994. CDEP participation is associated with the maintenance of language and culture as well as facilitating an ongoing connection to traditional lands. Participation in the scheme is associated with better social and economic outcomes compared to those of the unemployed or those not-in-the-labour-force, but much worse outcomes than those for people working in non-CDEP employment.

**Keywords:** Community Development Employment Projects (CDEP) scheme, Indigenous employment, government policy, remote area development.

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## Acronyms

ABS	Australian Bureau of Statistics
AGPS	Australian Government Publishing Service
ANAO	Australian National Audit Office
ANU	The Australian National University
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ATSIC	Aboriginal and Torres Strait Islander Commission
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Projects
CPI	Consumer Price Index
DEEWR	Department of Education, Employment and Workplace Relations
DEWR	Department of Employment and Workplace Relations
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
NATSIS	National Aboriginal and Torres Strait Islander Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NILF	not-in-the-labour-force
OECD	Organisation for Economic Co-operation and Development
RADL	Remote Access Data Laboratory
RJCP	Remote Jobs and Communities Program

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## Introduction

The Community Development Employment Project (CDEP) scheme has long been a feature of the labour market for Indigenous Australians, particularly in remote and regional areas. The scheme involves participants working for a notional equivalent of their income support payment. The scheme started in 1977 and subsequently expanded to have over 35,000 participants at its peak in 2002–03. Since then the number of CDEP participants has declined.

The design of the scheme had considerable continuity from its creation in 1977 until 2009. CDEP organisations were allocated funding to pay the wages of CDEP participants at a level similar to income support payments, supplemented with administrative and capital support. This funding has been used as a means to provide employment, training (informal and formal), activity, enterprise support, and income support to Indigenous participants. The scheme has always had a strong community employment and development focus and has progressively acquired an enhanced labour market program objective of increasing the job readiness of participants. This focus has especially emerged since the late 1990s following the Spicer review (Spicer 1997).<sup>1</sup>

There was a process of government review of CDEP in the mid-2000s which considered a range of concerns about CDEP scheme effectiveness as a labour market program and, in particular, the concern that CDEP had become a destination rather than a stepping stone to non-CDEP employment (Department of Employment and Workplace Relations (DEWR) 2005). The review process led to significant changes being made to the scheme from 2007, with funding progressively withdrawn from CDEP schemes in non-remote areas that were deemed by the Department of Education, Employment and Workplace Relations (DEEWR) to have ‘established economies’. The withdrawal of CDEP from these areas was completed by mid 2009 (Australian National Audit Office (ANAO) 2009). Collectively these changes have seen the number of participants decrease from about 35,200 in 2002–03 to about 10,500 in 2011.<sup>2</sup>

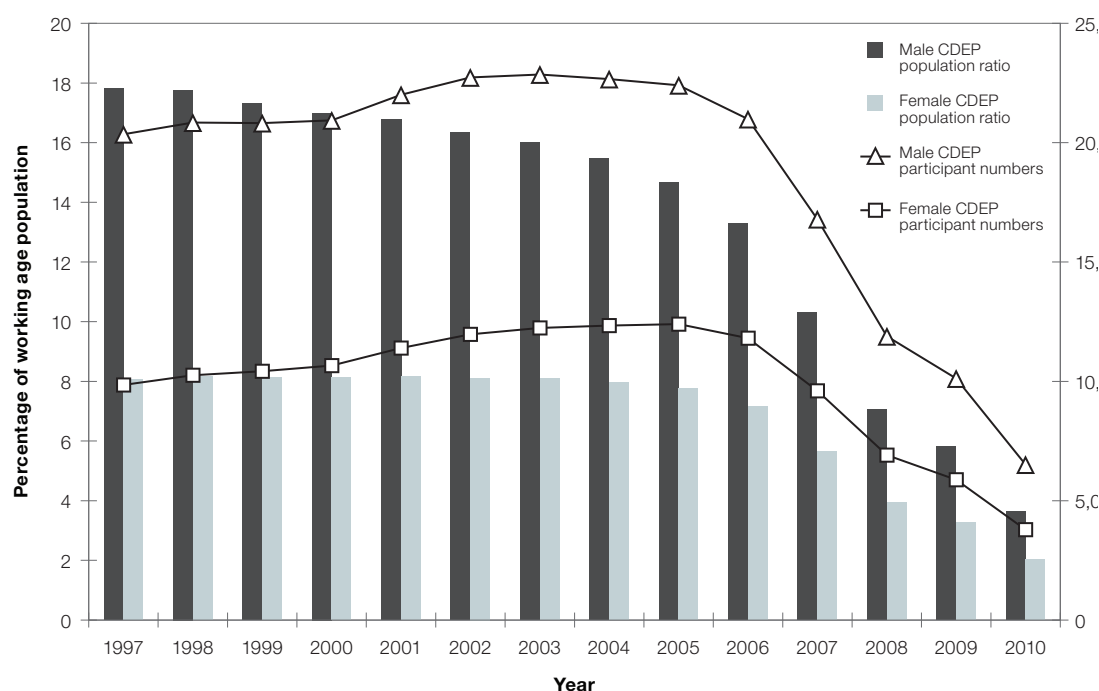
Since 1 July 2009 the current scheme has had two streams: the Work Readiness and the Community Development Stream. The Work Readiness Stream aims to assist Indigenous job seekers to gain the skills, training and capabilities needed to find employment outside of the scheme. The Community Development Stream has, as its name suggests, an explicit community development aim. New entrants to the scheme receive income support payments directly from Centrelink rather than CDEP wages or ‘top up’ received from the CDEP organisation.<sup>3</sup> People who have participated in the CDEP scheme since before 1 July 2009 are ‘grandfathered’ and can continue to receive CDEP wages (including ‘top up’ where appropriate) until July 2013.

In April 2012, the government announced the creation of the Remote Jobs and Communities Program (RJCP) which will bring together the Community Development Employment Projects, Job Services Australia, Disability Employment Services and the Indigenous Employment Program into a single integrated service (Australian Government 2012). The RJCP will commence operation in June 2013, at which time CDEP, at least as it has historically operated, will cease to exist. Notwithstanding, grandfathered CDEP participants will continue to receive CDEP payments until 2017 provided that they remain on the RJCP. Given that CDEP will continue, at least in some form, as part of the RJCP it is important to understand how the CDEP program worked and how it has evolved over time.

The CDEP scheme has been a hotly debated Indigenous policy issue over the past 15 years. On the one hand it has been argued that it provides a cost-effective way of providing both community development and labour market program type objectives for Indigenous Australians, particularly those without the skills or desire to find non-CDEP employment, or those living in areas with very few non-CDEP labour market opportunities (Altman 2007; Altman & Gray 2005). On the other hand it has been argued that the scheme has acted as a disincentive for participants to find non-CDEP employment (Hudson 2008). Other researchers and commentators have argued that while CDEP may provide a range of community and social benefits, it can also act as a disincentive to investing in education and finding paid employment (Hunter 2009; Pearson 2007).

This paper describes the nature of CDEP employment in 2008 and the extent to which it changed between 1994 and 2008. The paper also compares a selection of economic and social outcomes of CDEP participants with those of persons who are employed outside of CDEP, unemployed and not-in-the-labour-force (NILF) in 2008 and the extent to which these associations changed between 1994 and 2008. The analysis is based upon data from the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). The 2008 NATSISS is used because it is the most recent large-scale survey that reliably identifies CDEP participants. In fact the 2008 NATSISS and its forerunners—the 1994 NATSIS and the 2002 NATSISS—are the only large-scale surveys providing national representative samples of Indigenous Australians which reliably identify CDEP participants.

Given the progressive reduction and ultimate withdrawal of CDEP from urban and regional areas since 2007, the analysis of changes in the economic and social outcomes associated with participation in the CDEP scheme are analysed both for Australia as a whole and for remote regions.

**FIG. 1. CDEP employment–population ratio, Indigenous males and females aged 15 and over, 1997–2010**

**Note:** There is some CDEP data available before 1997 but it is difficult to compare this information with the most recent data. CDEP participants did not necessarily work in a job before 1997 and hence they would not be considered as employed using standard ABS definitions. After the Spicer review, all participants were expected to be employed and hence this chart focuses on the post Spicer data.

**Source:** Gray, Hunter & Lohar (2012). Derived from administrative data on Indigenous CDEP participants provided by the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) and various DEWR reports. Male and female participants estimated separately using information from various NATSIS and NATSISS surveys, while Indigenous population derived from ABS (2010).

The association between CDEP employment and a range of economic and social outcomes has been the subject of a number of studies (e.g. Aboriginal and Torres Strait Islander Commission (ATSIC) 1997; Altman, Gray & Levitus 2005; Altman, Gray & Sanders 2000; Hunter 2009). These have generally found that CDEP participants have slightly higher incomes and fare somewhat better on a range of social indicators than the unemployed or NILF Indigenous people, but that they have considerably poorer outcomes compared to the non-CDEP employed. These studies have mostly been based on the 1994 NATSIS, 2002 NATSISS and census data. This paper is the first analysis of this question using the 2008 NATSISS.

Understanding how the nature of the scheme, characteristics of CDEP participants and the economic and social outcomes associated with participation in the scheme changed between 1994 and 2008 is of interest for several reasons. First, this information is important to interpreting the trends in Indigenous employment. This is because the Australian Bureau of Statistics (ABS) has generally classified CDEP participation as equivalent to other forms of paid employment. How CDEP employment is treated has very important implications for the conclusions which are drawn about the trends in Indigenous employment, a point clearly illustrated by Gray and Hunter

(2011) using data from the NATSISS. This potentially makes a very big difference to the assessments made about the success or otherwise of government expenditure aimed at increasing Indigenous rates of employment.

Second, the CDEP scheme provides an interesting example of an employment program which had both direct employment objectives, labour market program type objectives and community development objectives. Understanding the economic and social impact of CDEP on participants is thus of relevance to the design of future labour market programs which may have both labour market and community development type objectives. Third, for future comparison, it provides a useful baseline for CDEP employment and the associated economic and social outcomes evident just prior to the significant changes to the scheme from July 2009.

This paper is structured as follows. The first section provides information on the changes to the number of CDEP participants since 1994 and describes the characteristics of CDEP jobs and how they have changed. This is followed by a comparison of select social characteristics and experiences of CDEP participants and those of the non-CDEP employed, unemployed and those NILF. The associations between CDEP participation



**TABLE 1. Selected characteristics of CDEP jobs, 1994 and 2008**

	1994				2008			
	Weekly hours	Under-employed (%)	2+ jobs (%)	Work allows cultural obligations to be met (%)	Weekly hours	Under-employed (%)	2+ jobs (%)	Work allows cultural obligations to be met (%)
<b>Gender</b>								
Female	23.4	40.3	2.1	68.7	22.7	25.0	10.4	83.5
Male	25.4	54.1	2.8	64.9	24.5	40.4	6.6	82.0
<b>Age</b>								
Under 35 years	24.5	52.2	3.1	66.7	23.4	40.1	4.5	79.1
Over 35 years	25.2	45.1	1.6	65.0	24.3	27.2	12.6	87.0
<b>Remoteness</b>								
Remote	24.8	45.9	2.3	75.7	24.4	32.6	7.5	82.4
Non-remote	24.4	62.7	3.5	34.1	19.2	48.1	12.3	84.1
<b>All CDEP workers</b>	23.4	40.3	2.1	68.7	23.8	34.4	8.1	82.6

**Note:** Table population is Indigenous people aged 18–64 years who were employed in the CDEP scheme. The number of CDEP workers answering the 2008 NATSISS questionnaire in remote areas was 450. In non-remote areas only 32 CDEP participants identified themselves as such in the NATSISS data—which represented an underlying population of 1,967. Accordingly great caution should be exercised in interpreting the non-remote results as they are less reliable than the remote estimates. Standard errors, which are estimated using a bootstrap estimator on replicate weights, are available on request. The statistical inferences in the text are based on these standard errors.

**Source:** 1994 NATSIS and 2008 NATSISS data (accessed via ABS Remote Access Data Laboratory (RADL)).

and a range of social and economic outcomes are then estimated and compared to the outcomes for the non-CDEP employed, unemployed and those NILF. The paper concludes with a discussion of the implications for policies that aim to close the gaps in social and economic outcomes for Indigenous and other Australians.

## Number of CDEP Participants and Characteristics of CDEP Jobs

The number of CDEP participants and their proportion of the working age population over the period 1997–2010 is shown in Fig. 1. The number of Indigenous CDEP participants has declined from a peak of around 35,200 participants in 2002–03 to 10,300 participants as at 30 June 2010. As a proportion of the working age population the proportion in the CDEP scheme has fallen for men from 1997, while for women it has fallen from about 2005.<sup>4</sup>

The decline in the proportion of the working age Indigenous population in the CDEP scheme over the period 1997–2005 is a consequence of a ‘cap’ being applied to the number of CDEP places funded. The decrease in the number of places from 2006 is to a large extent a consequence of the closing down of urban and regional CDEP schemes.

To explore possible impacts of changes to CDEP as a program, we provide a range of descriptive indicators on the nature of CDEP jobs and consider the extent to which

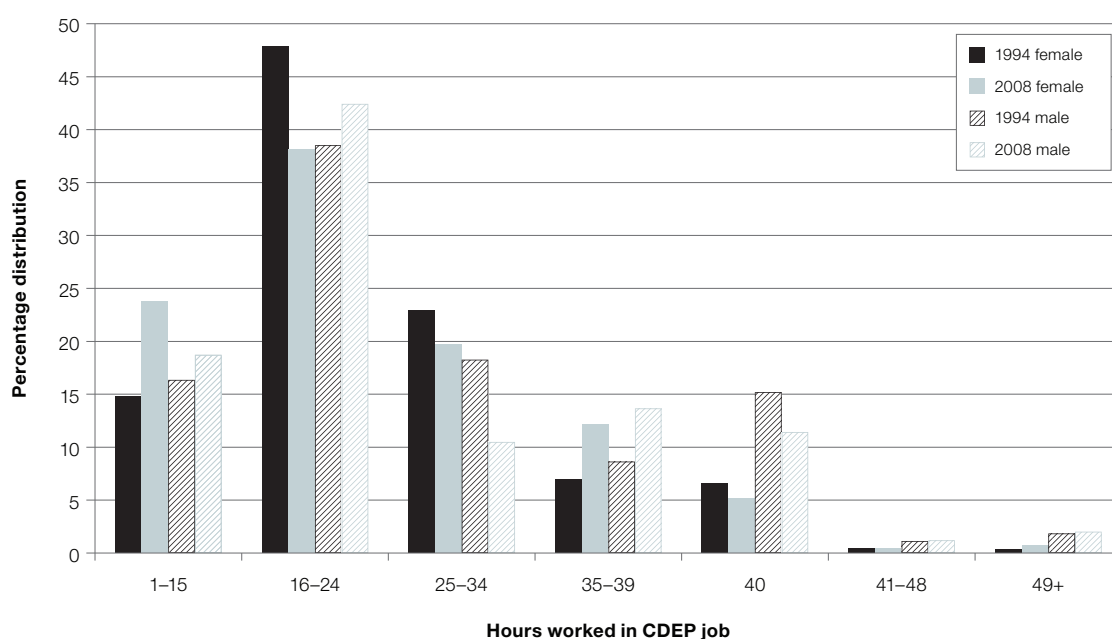
these changed between 1994 and 2008. Using data from the 1994 NATSIS and 2008 NATSISS we establish the following characteristics of CDEP jobs:

- average hours usually worked each week
- under-employment
- whether the participant has more than one job, and
- the extent to which work allows family and cultural obligations to be met.

Where appropriate, the extent to which the characteristics of CDEP jobs vary according to gender, age and geographic remoteness are examined, but the sample size is insufficient to support any further disaggregation of the data.

### Hours worked

The majority of CDEP jobs were, and remain, part-time with average usual weekly working hours not changing significantly between 1994 and 2008. Average hours worked per week were 23.4 hours in 1994 to 23.8 hours in 2008 (Table 1). According to the program design, CDEP participants are supposed to work around 15 hours per week in order to receive the standard CDEP payment. The observation that, on average, CDEP participants work 23 to 24 hours per week (about 8 hours extra per week) probably reflects the fact that some participants work extra hours for CDEP ‘top up’ and some participants also held a non-CDEP job.<sup>5</sup>

**FIG. 2.** Distribution of hours worked in CDEP jobs, Indigenous males and females aged 18–64, 1994 and 2008

Source: 1994 NATSIS and 2008 NATSISS data (accessed via ABS RADL).

The distribution of hours worked by CDEP participants in 1994 and 2008 is shown in Fig. 2. The overall distribution of hours worked is very similar in 1994 and 2008 for both males and females.<sup>6</sup> Between 1994 and 2008, the proportion of CDEP participants working full-time (more than 35 hours per week) increased slightly for males (from 14% to 19%) and was unchanged for females (27% and 28% in 1994 and 2008 respectively).

### *Under-employment and multiple jobs*

CDEP workers have higher rates of under-employment relative to other Australian workers (see ABS 2012). In 2008, about one-third indicated that they would like to work more hours (34.4%). The rate of under-employment among CDEP workers was generally lower than that evident among non-CDEP workers, but was broadly comparable to the rate for non-CDEP workers employed part-time (of whom 39% said that they would like to work more hours). The data for the non-CDEP employed are provided in Appendix Tables A1 and A2.

Under-employment among CDEP participants, on average, decreased slightly between 1994 and 2008. The decrease applies to a wide range of CDEP participants, including males and females, younger and older, and those in remote and non-remote areas. In contrast, the level of under-employment among non-CDEP workers was similar in 1994 and 2008. It is unclear why this difference has occurred. This effect would have been reinforced by the overall fall

in CDEP participant numbers noted above—these workers would not necessarily be replaced, let alone replaced by someone with similar preferences for working hours.

There were significant increases in the proportion of CDEP workers with more than one job for those over 35 years of age, but not for those under 35 years. The incidence of holding multiple jobs among non-CDEP workers is only slightly higher than among those in CDEP.

Hence there may have been some changes in the composition of CDEP jobs, with the proportion of CDEP participants holding more than one job having increased and the proportion under-employed having decreased. The decrease in under-employment is probably a result of people who wanted to work more hours taking up increased employment options in the relatively strong labour demand which occurred over most over the period 1994–2008 (Hunter & Gray 2012).

### *Ability to meet cultural obligations*

The proportion of CDEP employees who say that working in the CDEP scheme allows them to meet their cultural obligations is higher than Indigenous people employed in non-CDEP jobs (in 2008 it was 82.6% for CDEP participants and 40.8% for those in non-CDEP jobs). Between 1994 and 2008, the proportion of CDEP participants who said that they could meet cultural obligations increased from 68.7 per cent to 82.6 per cent (Table 1). The changes in

**TABLE 2. Personal weekly income by labour force status and remoteness, 1994 and 2008**

	CDEP (A\$ 2008)	Non-CDEP employed (A\$ 2008)	Unemployed (A\$ 2008)	NILF (A\$ 2008)
<b>Remote</b>				
<b>1994</b>	358.59	697.10	231.29	228.35
	(18.41)	(22.80)	(8.91)	(8.14)
<b>2008</b>	363.50	845.30	208.81	263.79
	(17.14)	(37.32)	(16.02)	(10.96)
<b>Non-remote</b>				
<b>1994</b>	401.10	723.99	241.13	267.37
	(36.33)	(19.01)	(8.92)	(7.61)
<b>2008</b>	364.03	851.73	226.64	305.07
	(35.96)	(19.55)	(12.25)	(\$7.50)

**Notes:** The population of this table is Indigenous people aged 18–64 years. The income measure is gross (before tax) weekly personal income. Income from 1994 has been converted to 2008 dollars using the Consumer Price Index (CPI). Standard errors, which are estimated using a bootstrap estimator on replicate weights, are reported in parenthesis.

**Source:** 1994 NATSIS and 2008 NATSISS data (accessed via ABS RADL).

the proportion of CDEP participants who indicated that work allowed their cultural obligations to be met increased in both remote areas and non-remote areas, and hence cannot be explained by the withdrawal of CDEP from urban and regional areas.

### *Personal income*

The existing research has found that CDEP participants have a higher income than people who are unemployed or NILF, but a substantially lower income than the non-CDEP employed. There are several reasons for this finding. First, CDEP participants qualify for additional income above their income support entitlement in the form of a CDEP ‘participant supplement’. In 2008 this was \$20.80 per fortnight. Second, historically the income test applied to CDEP payments has been more generous than the income test applied to income support payments (e.g. Parenting Payment, Newstart) and the rate at which CDEP payments were reduced as non-CDEP income increases is lower than was the case for income support payments.<sup>7</sup> In the most recent round of reforms the CDEP supplement is available only to ‘grandfathered’ CDEP participants, but new participants are eligible for a similar ‘approved program of work’ supplement paid at the same rate. The equivalence of these supplements aligns CDEP participants with work-for-the-dole participants.

Information on gross personal income in 1994 and 2008 by labour force status is provided in Table 2. There are several key points to take from Table 2. First, as expected, personal incomes of the non-CDEP employed were much higher than for those in the other labour force categories. This was true in both 1994 and 2008 and in remote and non-remote areas. Second, in both 1994 and 2008 the personal income of CDEP participants was substantially higher than that of the unemployed or those NILF. For example, in 2008 in remote areas the income of CDEP participants was \$359, which was substantially higher than the weekly income of the unemployed in these areas of \$231 and those NILF of \$228.

Third, between 1994 and 2008 the weekly income of CDEP participants in remote areas was basically unchanged at around \$360 (in 2008 dollars). Fourth, the income of the non-CDEP employed increased between 1994 and 2008 in real terms. For example, in remote areas it increased from \$697 to \$845 per week over this period (a real increase of 21%). Given that CDEP incomes have not increased, CDEP income as a percentage of non-CDEP income has fallen substantially over this period. For example, in remote areas CDEP income was 51 per cent of the income of the non-CDEP employed in 1994, and by 2008 it had fallen to 43 per cent.

**TABLE 3. Characteristics of CDEP jobs, 2008**

	Main job is part of CDEP (%)	Total time spent in paid employment (years)	Time in current job (years)	Considers it a permanent job (%)	On CDEP for over 2 years (%)
<b>Gender</b>					
Female	96.3	10.1	3.9	68.2	56.9
Male	97.8	12.9	3.6	63.8	60.2
<b>Remoteness</b>					
Remote	97.7	11.9	3.9	68.7	61.3
Non-remote	93.4	11.4	2.0	41.6	42.0
<b>Age</b>					
Under 35 years of age	98.5	6.5	2.6	57.3	52.5
Over 35 years of age	95.6	18.5	5.1	75.9	67.3
<b>All CDEP</b>	<b>97.2</b>	<b>11.8</b>	<b>3.7</b>	<b>65.5</b>	<b>58.9</b>

**Notes:** The population of this table is Indigenous people aged 18–64 years. Standard errors, which are estimated using a bootstrap estimator on replicate weights, are available on request. Standard errors are not reported here to save space, but the inferences in the text are based on them.

**Source:** 2008 NATSISS data (accessed via ABS RADL).

**TABLE 4. Distribution of occupation by CDEP status and gender, 2008**

Occupation in main job	CDEP (%)		Non-CDEP employed (%)	
	Female	Male	Female	Male
Managers	3.5	4.0	5.5	5.6
Professionals	16.9	6.5	17.4	10.8
Technicians and Trades Workers	6.0	22.8	3.1	20.9
Community and Personal Service Workers	21.1	7.8	27.1	10.9
Clerical and Administrative Workers	12.9	2.5	22.3	5.4
Sales Workers	5.8	0.1	8.7	3.3
Machinery Operators And Drivers	1.4	6.0	2.1	18.6
Labourers	32.3	50.4	13.9	24.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Segregation between Indigenous and non-Indigenous occupations	0.338	0.419	0.204	0.262

**Note:** The table population is 18–64 year old employed Indigenous males and females. Segregation indexes are the standard dissimilarity indexes (Duncan & Duncan 1955). Occupation classification is based on the Australian and New Zealand Standard Classification of Occupations (ANZSCO).

**Source:** Indigenous data from 2008 NATSISS data (accessed via ABS RADL). Non-Indigenous occupations based on 2006 Census data (provided in Appendix Table A4). Segregation indexes based on author calculations

## Duration on CDEP and Permanency of CDEP Jobs

The 2008 NATSISS collected information on a number of other characteristics of CDEP jobs which were not collected in the 1994 NATSIS. This section focuses on:

- whether the main part of a participant's job is part of the CDEP scheme
- total number of years spent in paid employment (CDEP plus non-CDEP employment)
- length of time in current job
- whether the participant considers their CDEP job to be a permanent job, and
- whether the participant has been on CDEP for more than two years.

These characteristics are shown in Table 3 by gender, age and geographic remoteness. On average, CDEP workers have spent more than 10 years in the workforce, a not inconsiderable level of experience. The only group for which this was not the case was the under 35 year olds who had an average of 6.5 years in paid employment. Younger non-CDEP workers also tended to have similarly lower levels of experience (see Appendix Table A3). This is explained by the fact that younger people have obviously had less opportunity to gain experience. Hence the observation that CDEP workers have about five years less experience in paid employment than non-CDEP scheme workers appears largely to be due to the younger age profile of CDEP workers.

The pattern of time spent in current job is consistent with the overall experience in paid employment. That is, those CDEP workers with longer overall workforce experience tend to have had a longer duration in their current job. However, some groups have a greater proportion of their labour market experience in the current (CDEP) job. Younger and female participants, especially those living in remote areas, seem to be more reliant on CDEP scheme work as part of their overall workforce experience than comparable groups of non-CDEP scheme workers, as indicated by a comparison with data in Table A3.

The NATSISS 2008 data indicates that two-thirds of CDEP participants consider their job to be permanent. While it is not entirely clear how to interpret the term 'permanent' in this context, in nearly all categories over 50 per cent of CDEP workers have been in their current CDEP scheme job for over two years (Table 2).<sup>8</sup> To put this in context, an even higher proportion of non-CDEP workers consider their job to permanent (Table A3).

## Occupations of CDEP Participants and the Non-CDEP Employed

A lack of data has meant that there has been only a very limited analysis of the occupations of CDEP participants and how they compare to the occupational distribution of the non-CDEP employed. The census, while providing detailed information on occupation, does not reliably identify CDEP employment across Australia and so it has not been possible to obtain reliable national estimates of the occupation distribution of CDEP participants. The 1994 NATSIS and 2002 NATSISS do not provide information on occupation. However, for the first time the 2008 NATSISS provides detailed information on occupation which can be used to estimate the occupational distribution for CDEP participants and the non-CDEP employed.

Comparing the occupations of CDEP participants and non-CDEP employed is one way of understanding differences in the nature of CDEP and non-CDEP employment (Table 3). There are substantial differences in the distribution of occupations for the CDEP participants and the Indigenous non-CDEP employed. Overall, CDEP participants are more likely to be working in lower skill level occupations than the non-CDEP employed (Table 3). For example, over one-half of male CDEP workers are labourers, compared to one-in-four Indigenous men in non-CDEP employment who are working as labourers. Nonetheless, there is little difference in the proportion of CDEP participants and Indigenous non-CDEP employed who are in professional occupations.

One way to summarise this difference in occupational distribution is to use a segregation index which measures the degree to which the occupational distributions differ on a scale of zero (no difference) to 100 (maximum difference). The final row of Table 4 provides estimates of the segregation index, comparing the occupational distribution of Indigenous males and females to those of the non-Indigenous employed.

The segregation indexes clearly illustrate the extent of the difference in the occupational distribution of the CDEP participants and the non-CDEP employed. The segregation indexes comparing Indigenous to the non-Indigenous are substantially higher for CDEP participants than for the non-CDEP employed. For example, the segregation index indicates that 41.9 per cent of Indigenous males participating in the CDEP scheme would have to change occupations to be employed in similar sorts of jobs as non-Indigenous workers. In contrast, 26.2 per cent of Indigenous males in non-CDEP employment would have to change jobs to have the same occupational distribution as non-Indigenous workers. The segregation indexes are lower for Indigenous women than Indigenous men indicating that fewer women would have to change occupation to achieve the same occupation distribution as non-Indigenous



**TABLE 5.** Community development and related characteristics by labour force status and gender, remote areas 2008

	Non-CDEP employed (%)	CDEP (%)	Unemployed (%)	NILF (%)
<b>Females</b>				
Speaks an Indigenous language	38.6 (3.4)	72.2 (6.8)	49.7 (6.4)	52.5 (3.3)
Lives on traditional country (homelands)	37.6 (3.1)	62.7 (6.4)	43.0 (6.9)	44.8 (3.2)
Non-market production (hunting and gathering)	56.2 (3.6)	81.6 (3.8)	63.9 (6.0)	61.5 (3.0)
Felt discriminated against in the previous 12 months	32.5 (3.0)	22.0 (4.0)	37.6 (6.0)	23.1 (2.6)
Felt discriminated against in the previous 12 months because of work	8.0 (1.4)	3.6 (1.9)	22.3 (4.6)	1.8 (0.6)
Little or no say within community on important issues	38.6 (3.1)	43.0 (4.6)	51.5 (6.5)	55.0 (2.7)
<b>Males</b>				
Speaks an Indigenous language	41.3 (4.4)	72.0 (4.9)	56.1 (6.1)	60.1 (4.1)
Lives on traditional country (homelands)	35.9 (3.8)	53.8 (5.3)	42.0 (4.7)	50.2 (5.2)
Non-market production (hunting and gathering)	75.5 (3.4)	85.9 (2.7)	82.3 (4.9)	70.0 (3.9)
Felt discriminated against in the previous 12 months	30.4 (3.4)	28.5 (3.8)	35.6 (5.9)	20.2 (2.8)
Felt discriminated against in the previous 12 months because of work	9.2 (1.9)	8.8 (2.4)	17.4 (4.7)	2.3 (1.5)
Little or no say within community on important issues	38.4 (3.2)	35.7 (4.0)	55.5 (6.1)	52.6 (3.8)

**Notes:** The population of this table is Indigenous females and males aged 18–64 years. Standard errors, reported in brackets, are estimated using a bootstrap estimator on replicate weights.

**Source:** 2008 NATSISS data (accessed via ABS RADL).

women than men would to change occupation to achieve the same occupational distribution as non-Indigenous men. For example, 33.8 per cent of Indigenous women participating in the CDEP scheme would have to change occupation in order to have the same occupational distribution as non-Indigenous women, compared to 41.<sup>9</sup> per cent of Indigenous men having to change occupation in order to have the same distribution as non-Indigenous men.

## Selected Social Characteristics of CDEP Participants and Community Development

This section focuses on a range of social characteristics of CDEP participants and how the CDEP employed compare to the non-CDEP employed, unemployed and those NILF (as shown in Table 5). The main aim is to examine social characteristics of CDEP workers that are arguably associated with community development outcomes rather than the economic circumstances surrounding employment conditions. By 2008 the vast majority of CDEP participation was in remote areas, and so the analysis in this section is restricted to people living in remote areas.

Two sets of social characteristics are examined. The first set relates to participation in cultural activities and connection to culture. The specific measures analysed are whether the individual speaks an Indigenous language, lives on homelands/traditional country, and engages in hunting and gathering. These variables are interesting because, historically, a feature of CDEP has been the flexibility and time for CDEP participants to engage in customary cultural activities. In some cases, CDEP activities can involve customary activities including land management practices. Other variables are whether respondents are studying and the extent of their input into community decisions on important issues.

The second set of variables relates to the experience of discrimination: whether respondents felt discriminated against in the previous 12 months, and whether respondents felt discriminated against in the previous 12 months because of work. Given that the vast majority of CDEP participants are Indigenous, it is possible that CDEP participants experience lower levels of discrimination than Indigenous workers in non-CDEP jobs (because there is a relatively low likelihood of inter-racial interactions in CDEP workplaces). Several studies have found that some CDEP participants find CDEP employment is within their 'comfort zone' (e.g. ATSIC 1997; Smith 1994). Finally, the extent to which the participants has little or no say within their community on important issues is analysed.

A higher proportion of female CDEP participants speak an Indigenous language (72%) compared to Indigenous women in the other categories in remote areas (Table

5). There is little difference in the proportion speaking an Indigenous language between the non-CDEP employed, unemployed and those NILF (39%, 50% and 53% respectively). The pattern of results is similar for Indigenous males.

There is a similar pattern of results for living on traditional country (or homelands) as for speaking an Indigenous language. Over 60 per cent of Indigenous women participants in CDEP live on traditional country compared to around 40 per cent of other Indigenous women living in remote areas. For Indigenous men, CDEP participants are less likely to live on country than Indigenous women participants in CDEP (54%) but they are still more likely than other Indigenous men to live on traditional country.

Similarly CDEP participants are highly likely to engage in hunting and gathering, with over four-fifths of women and men being involved in this form of non-market household production (82% and 86% respectively). While hunting and gathering is the norm in remote areas, women and men in other labour force categories tend to be significantly less likely to engage in this activity. The non-CDEP employed are the group who are least likely to hunt and gather (56% and 76% for women and men respectively), however it should be noted that as a group the engagement in these activities is not significantly different from that evident for women and men who are NILF.

A large and substantial number of Indigenous people feel discriminated against irrespective of labour force status, with over one-quarter of working age adults reporting discrimination in the previous 12 months. For both males and females the group most likely to feel that they had been discriminated against in the last 12-months are the unemployed, which is largely associated with reporting a work-related reason for discrimination. While female CDEP participants are less likely to experience any discrimination than other Indigenous females, male CDEP participants are actually significantly more likely than NILF males to be discriminated against in the previous 12 months (29% and 20% respectively).

Another useful comparison is between the discrimination reported by CDEP and non-CDEP workers. For females, non-CDEP employed are more likely to report any discrimination than CDEP participants (33% and 22%); a substantial proportion of this differential is due to the different rates of reporting discrimination because of work (8% and 4%). In contrast there is no significant difference in the male rates of reporting discrimination between CDEP and non-CDEP employed, with around 30% reporting any discrimination in the previous 12 months and less than 10% specifically identifying labour market discrimination.

**TABLE 6.** Marginal effect of CDEP and other labour force categories on selected social and economic outcomes, 2008

	Marginal effect (difference from unemployed)			
	CDEP (%)	Non-CDEP employed (%)	NILF (%)	Base probability for unemployed (%)
Arrested	-5.8 **	-13.1 ***	-5.6 ***	21.1
Studying	1.9	5.1 ***	-0.8	7.4
Violent neighbourhood	-3.7	-6.1 ***	-7.2 ***	40.0
Victim of crime	-5.5 *	-6.9 **	-2.3	29.0
Financial Stress	-6.3 *	-25.1 ***	1.0	59.5
Low household income	-26.6 ***	-56.0 ***	-4.8 *	65.5
Disability	0.4	-1.8 **	7.9 ***	5.1
Fair or poor health	-6.8 **	-12.0 ***	8.5 ***	25.0

**Note:** The asterisks indicate statistically significant differences in the outcome variable for each labour force state compared to the unemployed. \*\*\* indicates a difference at 1% level, \*\* a difference at the 5% level and \* a difference at the 10% level.

**Source:** Calculated using multivariate regression results reported in Appendix Tables B2 and B3.

Participants in the CDEP scheme are less likely than the unemployed or those NILF to say that they have little or no say within community on important issues. The CDEP and non-CDEP employed are similarly likely to say that they have little or no say within community on important issues.

In terms of the social characteristics of CDEP participants, the observations above generally confirm the distinct nature of much CDEP scheme work, which often involve customary practices and which has been found in other studies (Altman, Biddle & Buchanan 2012). However, the data only provide weak evidence that CDEP employment is more consistent with Indigenous preferences than non-CDEP employment (i.e. within some sort of 'comfort zone'). While discrimination is less evident among female CDEP participants compared to female non-CDEP employed, the reporting of discrimination was not that different between the respective categories of employed males. Similarly the sense of efficacy within the community is not significantly different between CDEP and non-CDEP employed.

## The associations between CDEP participation and social and economic outcomes

### *Empirical approach*

It is very difficult (or impossible) to identify the causal impacts of participation in the CDEP scheme on the wellbeing of participants. This is because we do not know what their wellbeing would have been were they not participating in the scheme (i.e. the counterfactual). The approach taken in this paper (and other studies such as Hunter 1999) is to compare the wellbeing of CDEP

participants with people in other labour force states. The main finding of Hunter (2009) was that while CDEP participants had higher levels of wellbeing than the unemployed for most measures, they had much lower levels of wellbeing for the measures considered than the non-CDEP employed.

In this section, the association between labour force status (CDEP, non-CDEP employed, unemployed and NILF) are estimated using multivariate regression models. The regression models allow the associations between labour force status and wellbeing to be estimated while holding constant the effects of other variables which might impact upon wellbeing independent of labour force status. The analysis updates similar estimates by Hunter (1999) of the associations between labour force status and wellbeing using the 2002 NATSISS. The explanatory variables included in the regression model are as close as possible to those used by Hunter (2009), in order to compare the extent to which the associations between CDEP participation and the various measures of wellbeing has changed between 2002 and 2008. The only differences in the measures of wellbeing analysed here to those analysed by Hunter (2009) are that the earlier study examined substance use which is not available from the 2008 NATSISS data; and this paper includes a measure of living in a low income household a measure not examined by in the 2009 study.

Three sets of outcomes are analysed. The first set relates to health: whether respondents have a disability, and whether they have fair or poor health. The second set relates to crime and safety: whether respondents have been arrested, whether they live in a violent neighbourhood, and whether they have been a victim/survivor of crime. The third set of variables comprises financial measures: whether

respondents have experienced financial stress and have a low household income.

The measures of wellbeing are all coded as binary variables (i.e. zero/one variables) and thus the logit model is appropriate. In addition to labour force status (specified using a set of dummy variables for being CDEP employed, non-CDEP employed, unemployed and NILF), other explanatory variables included in the regression models are age, sex, educational attainment, family and household composition and geographic remoteness by State of residence.

### ***Regression results***

The summary statistics and the model estimates are provided in Appendix B. The models appear to be well specified and in general the results are consistent with finding from other studies of the determinants of labour force status for Indigenous Australians. The non-linear nature of the logistic regression models means that interpreting the magnitude of the coefficient estimates is difficult. In this paper we illustrate the estimated impact of being in each labour force state on the respective outcome measures, using marginal effects. The marginal effects show the change in the predicted probability of social or economic outcomes of moving from unemployment to the other labour force states (i.e. CDEP employed, non-CDEP employed or NILF). The predicted probabilities are calculated holding constant the value of the other explanatory variables at the sample means. Table 6 shows the estimated marginal effects and the base probability, which is the predicted probability of each outcome variable for an unemployed person with the average characteristics in the sample.

There are statistically significant differences in the social and economic outcomes of CDEP participants compared to the unemployed and those NILF. The CDEP employed are 5.8 percentage points less likely to have been arrested than the unemployed, 5.5 percentage points less likely to have been a victim of actual or threatened physical violence, 6.3 percentage points less likely to have experienced financial stress, 26.6 percentage points less likely live in a low income household and 6.8 percentage points less likely to report having fair or poor health status.

These findings—that CDEP participants have higher levels of wellbeing than the unemployed—are largely consistent with the estimates of Hunter (2009) using the 2002 NATSISS. The main difference is that in examining the 2008 data, there are no statistically significant differences between CDEP participants and the unemployed in terms of studying, living in a violent neighbourhood, and having a disability. By contrast, Hunter (2009) found that in 2002 the differences between CDEP employed and the unemployed

were statistically significant for those outcomes. It is possible that the changes between 2002 and 2008 reflect a change in the nature of CDEP work. If CDEP was becoming more like a mainstream work-for-the-dole scheme or a standard employment program and less like a community development program, then one might have expected that outcomes would align more with those for the unemployed and NILF categories. It may also be a reflection of changes in the types of people in CDEP employment between 2002 and 2008.<sup>9</sup>

While CDEP participants have better outcomes on a range of economic and social measures than do the unemployed, CDEP participants have much worse outcomes than the non-CDEP employed for all of the social and economic outcomes analysed. The differences between the CDEP employed and the non-CDEP employed are much larger than between the CDEP employed and the unemployed. For example, the CDEP employed are 5.3 percentage points less likely to have been arrested than the unemployed, but the non-CDEP employed are 13.1 percentage points less likely to have been arrested than the unemployed.

### **Conclusion**

After nearly 30 years of expansion of the CDEP scheme from its starting point in remote Australia to covering all areas of Australia, from mid 2000 the number of CDEP participants has been reduced and the scheme has been withdrawn from urban areas and regional centres. Since mid 2009 it has only operated in remote areas and from June 2013 the CDEP scheme will be incorporated into the new RJCP. The RJCP will bring together the Community Development Employment Projects, Job Services Australia, Disability Employment Services and the Indigenous Employment Program into a single integrated service. This will mean that CDEP will cease to exist, at least as it has historically operated.

This paper has described the nature of CDEP employment in 2008 and the extent to which it changed between 1994 and 2008. The paper also compares a selection of economic outcomes of CDEP participants with those of Indigenous people in non-CDEP employment, who are unemployed or who are NILF. The characteristics of CDEP jobs in 2008 are very similar to those found in 1994 and the overall conclusion is that there has been little change in the fundamental nature of CDEP jobs since 1994. It has remained largely part-time employment, with virtually no change in the hours worked by CDEP participants. Correspondingly, the incomes of CDEP participants (in real terms) have hardly changed over this period. While the incomes of CDEP participants are higher than those of the unemployed and those of people who are NILF, the relativity of the income of CDEP participants to that of

the unemployed and those NILF was similar in 2008 and 1994. However, over this period the income of the non-CDEP employed has increased more rapidly and hence the incomes of CDEP participants fell relative to the incomes of the non-CDEP employed.

The general lack of change in the characteristics of CDEP jobs or the outcomes associated with being a CDEP participant since 1994 is an important finding in the context of significant changes to both the number of participants and geographic coverage of the scheme over this period, and some changes to the rules of the scheme. One possible interpretation of this is that the scheme has been very resilient to attempts by policy makers to alter the way in which the scheme operates.

Overall, the CDEP scheme appears to give some support for Indigenous language and customary practice by providing economic activity that allows participants to live on or near their traditional country. However, the evidence that participation in CDEP improves community development through reducing discrimination or enhancing a sense of personal efficacy in important community issues is weak. Indeed, simply having a job is the most important thing for enhancing the sense of efficacy in the community rather than whether or not one's job is associated with the CDEP scheme.

While the data presented in this paper are consistent with the hypothesis that CDEP participation has some small positive social and health impacts, it equally could be the case that the slightly better social outcomes for CDEP participants compared to the unemployed are because those who participate in CDEP have better outcomes prior to commencing on CDEP (i.e. there may be selection effects on unobservable characteristics of individuals). While it is not possible to disentangle these alternative hypotheses using the available data, it is the case that the CDEP employed have only slightly better outcomes for most measures than the unemployed and generally much worse than for the non-CDEP employed.

These findings confirm the findings of earlier research that CDEP positions are very different both in terms of 'job characteristics' and the social and economic outcomes associated with participation, compared to non-CDEP employment (Altman, Gray & Sanders 2000; Hunter 2009). Combined with the changes in the number of CDEP participants since 1994, this reinforces the importance of adjusting Indigenous employment estimates for the CDEP scheme; failure to do so leads to a very misleading picture of the trends in Indigenous employment (also see Gray, Hunter & Lohoar 2012; Hunter & Gray 2012).

While the scheme will cease to exist from mid 2013 in its current form, it appears that aspects of the scheme will live on in the new RJCP. The analysis in this paper therefore provides a benchmark against which any future outcomes associated with the RJCP can be compared.



## Notes

1. An overview of the CDEP scheme and its history is provided by Altman, Gray & Levitus (2005).
2. According to DEWR there were around 37,000 CDEP participants in 2005 (DEWR 2005). This number includes non-Indigenous CDEP participants. It appears that there were around 1,200 non-Indigenous participants in 2004 at the time when responsibility for CDEP was transferred from Aboriginal and Torres Strait Islander Social Services (Aboriginal and Torres Strait Islander Commission data for June 2004). The numbers of CDEP participants reported in this paper are an estimate of the number of Indigenous participants. The estimate of the number of CDEP participants from the 1994 NATSIS and 2008 NATSISS differ from the administrative data because of the differences in method of producing the estimate (e.g. social survey and administrative data).
3. The concept of 'top up' pre-dates the current round of reforms within the CDEP scheme. It can be loosely defined as an additional CDEP income over the notional income support payment that can be funded by internal program funding or external funds (e.g. from sale of goods and services created by CDEP work; see Gray & Thacker 2000).
4. Consistent with the decrease in number of CDEP participants since 2006 (see Fig. 1) the proportion of the working age Indigenous population who are in the CDEP scheme declined between 1994 and 2008, although the fall is mostly contained to men (11.4% cf 7.1%) with little change in the proportion of Indigenous women working in the CDEP scheme (4.9% cf 3.9%).
5. The NATSISS 2008 and NATSIS 1994 collected data on hours worked in all jobs.
6. The incidence of holding multiple jobs among non-CDEP workers is only slightly higher than among CDEP scheme employed.
7. However, from July 2009 the rules have changed so that while new CDEP participants may still engage in part-time work in addition to their CDEP commitments, their CDEP payment is reduced as earned income increases at a higher rate than was the case previously. It is now consistent with the standard income test for income support payments.
8. The only exception is non-remote areas where people have a greater number of labour market alternatives.
9. A further difference is that using the 2002 data, Hunter (2009) found that CDEP participants were more likely to be living in a violent neighbourhood than were the unemployed, whereas this study using the 2008 data finds no statistically significant differences between the CDEP participants and unemployed for this variable.

## Appendix A. Selected characteristics of non-CDEP employed

**TABLE A1.** Selected characteristics of Indigenous females employed in non-CDEP jobs, 1994 and 2008

	Average hours usually worked each week	Work allows obligations to be met (%)	Under-employed (%)	More than one job held (%)
<b>1994 Remote</b>				
Under 35 years	30.4	56.8	19.2	2.4
Over 35 years	32.3	62.7	15.6	1.8
<b>1994 Non-remote</b>				
Under 35 years	32.0	44.7	20.0	3.4
Over 35 years	25.7	31.1	31.0	3.7
All female non-CDEP in 1994	29.4	42.4	23.8	3.3
<b>2008 Remote</b>				
Under 35 years	31.1	62.9	19.2	12.8
Over 35 years	34.8	61.1	12.0	11.2
<b>2008 Non-remote</b>				
Under 35 years	31.0	35.1	30.8	10.9
Over 35 years	31.1	39.7	16.9	11.6
All female non-CDEP in 2008	31.4	42.0	21.6	11.4

**Note:** Table population is Indigenous females aged 18–64 years in non-CDEP scheme jobs.

**Source:** 1994 NATSIS and 2008 NATSISS data (accessed via ABS RADL).

**TABLE A2.** Characteristics of Indigenous males employed in non-CDEP jobs, 1994 and 2008

	Average hours usually worked each week	Work allows obligations to be met (%)	Under-employed (%)	More than one job held (%)
<b>1994 Remote</b>				
Under 35 years	36.3	66.8	19.6	3.1
Over 35 years	37.4	61.2	13.7	4.6
<b>1994 Non-remote</b>				
Under 35 years	39.5	32.1	20.2	3.2
Over 35 years	40.6	27.2	9.5	6.6
All male non-CDEP in 1994	39.4	36.3	15.7	4.6
<b>2008 Remote</b>				
Under 35 years	39.2	53.3	20.0	9.0
Over 35 years	38.5	59.7	14.1	13.1
<b>2008 Non-remote</b>				
Under 35 years	36.8	33.3	30.0	8.8
Over 35 years	40.4	39.9	12.2	10.6
All male non-CDEP in 2008	38.6	40.0	20.7	9.9

**Note:** Table population is Indigenous males aged 18–64 years in non-CDEP scheme jobs.

**Source:** 1994 NATSIS and 2008 NATSISS data (accessed via ABS RADL).

**TABLE A3.** Selected employment characteristics of Indigenous non-CDEP employed by gender, 2008

	Total time spent in paid employment (years)	Time in current job (years)	Considers job is permanent (%)
<b>Female</b>			
<b>2008 Remote</b>			
Under 35 years	7.1	2.0	82.5
Over 35 years	20.1	6.1	90.6
<b>2008 Non-remote</b>			
Under 35 years	7.8	2.1	76.8
Over 35 years	21.2	5.9	84.7
<b>All female non-CDEP</b>	<b>15.1</b>	<b>4.3</b>	<b>82.3</b>
<b>Male</b>			
<b>2008 Remote</b>			
Under 35 years	8.4	2.4	84.0
Over 35 years	24.8	5.9	82.1
<b>2008 Non-remote</b>			
Under 35 years	8.2	2.4	81.3
Over 35 years	25.4	7.0	88.9
<b>All male non-CDEP</b>	<b>16.6</b>	<b>4.6</b>	<b>84.6</b>

**Note:** Table population is Indigenous people aged 18–64 years employed in non-CDEP scheme jobs.  
**Source:** 2008 NATSISS data (accessed via RADL).

**TABLE A4.** Occupation by gender, non-Indigenous, 2006

	Females (%)	Males (%)
Managers	10.5	17.0
Professionals	25.0	18.8
Technicians and Trades Workers	4.7	23.2
Community and Personal Service Workers	12.9	5.1
Clerical and Administrative Workers	26.5	6.8
Sales Workers	10.7	6.3
Machinery Operators And Drivers	1.6	11.6
Labourers	8.1	11.2
<b>Total Employed</b>	<b>3,744,036</b>	<b>4,380,795</b>

**Note:** Table population is non-Indigenous employed aged 18–64 years.  
**Source:** 2006 Census of Population and Housing data.

## Appendix B. Summary statistics and regression results

**TABLE B1.** Summary statistics for logistic regression (%), NATSISS 2008

Dependent variables			
Variable	Description	Mean	Standard deviation
Arrested	Arrested in the previous 5 years	16.5	37.1
Studying	Currently studying	11.9	32.3
Violent neighbourhood	Aware of community problems with violent behaviour (e.g. family violence, assault & sexual assault)	35.3	47.8
Victim	Victim of physical violence in the previous 12 months	26.1	43.9
Financial Stress	Whether could raise \$2000 cash within 2 weeks	47.9	50.0
Low household income	Household income was less than half of the median Australian income (i.e. 'poor')	36.8	48.2
Disability	Has a severe or profound disability	8.1	27.4
Fair or poor health	Self-assessed health status is fair or poor	23.8	42.6
Independent variables			
CDEP	Employed in CDEP scheme	7.3	25.9
non-CDEP employed	Employed outside CDEP scheme	48.4	50.0
NILF	Not in the labour force	35.3	47.8
Age	Age (in years)	37	13
Age <sup>2</sup>	Age squared	1,533	996
Mixed household	Households with both Indigenous and non-Indigenous residents	35.6	47.9
Partner	Has a marital partner (married or de facto)	57.7	49.4
Kids	Children resident in household	54.0	49.8
Part*kids	Interaction of Partners and Child variables	34.7	47.6
Multi-family household	Households have more than one family resident in dwelling	13.1	33.8
Taken	Individual taken from family as a child	9.2	28.9
Difficulty in speaking English	Difficulty in speaking English	3.8	19.1
Degree	Holds a degree level qualification	5.8	23.4
Other qualification	Other post-school qualification	24.4	42.9
Year 12	Completed Year 12	11.9	32.4
Year 10 or 11	Highest level of schooling is Year 10 or 11	32.6	46.9
Speaks an Indigenous Language	Speaks an Indigenous language	23.4	42.4
Male	Respondent is male	42.9	49.5
Number of observations	6,449		

**Notes:** Indigenous persons aged 18–64 years. Geography was controlled for using 12 dummy variables that identified the disaggregated information of where respondents lived by State and remoteness category (classified using the standard ARIA categories), aggregated where necessary to preserve confidentiality by the ABS. Distribution not reported here to save space but the summary statistics are consistent with official ABS estimates of geographic distributions.

**Source:** 2008 NATSISS data (accessed via ABS RADL).



**TABLE B2.** Logistic regression: arrested, studying, violent neighbourhood and victim of crime, 2008

	Arrested		Studying		Violent neighbourhood		Victim	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
CDEP	-0.390	(0.158)	0.245	(0.241)	-0.155	(0.135)	-0.284	(0.153)
Non-CDEP employed	-1.127	(0.117)	0.582	(0.155)	-0.263	(0.099)	-0.365	(0.103)
NILF	-0.378	(0.116)	-0.117	(0.168)	-0.309	(0.102)	-0.116	(0.104)
Age	0.128	(0.022)	-0.147	(0.021)	0.011	(0.015)	0.041	(0.017)
Age <sup>2</sup>	-0.002	(0.000)	0.001	(0.000)	0.000	(0.000)	-0.001	(0.000)
Mixed household	-0.309	(0.102)	0.127	(0.107)	-0.269	(0.073)	-0.085	(0.080)
Partner	-0.091	(0.123)	-0.283	(0.126)	-0.063	(0.087)	-0.508	(0.099)
Kids	-0.006	(0.119)	-0.213	(0.129)	0.083	(0.088)	0.036	(0.090)
Partner*kids	-0.156	(0.157)	0.029	(0.166)	0.038	(0.113)	-0.103	(0.123)
Multi-family household	0.074	(0.112)	0.015	(0.128)	0.114	(0.083)	-0.226	(0.096)
Taken	0.709	(0.117)	0.164	(0.143)	0.332	(0.094)	0.754	(0.094)
NSW Inner Regional	-0.351	(0.259)	-0.026	(0.254)	-0.431	(0.173)	0.200	(0.189)
NSW Outer Regional	0.263	(0.261)	-0.084	(0.316)	-0.050	(0.192)	0.199	(0.213)
Vic Total	0.175	(0.188)	0.303	(0.188)	-0.484	(0.132)	0.199	(0.146)
Qld Major Cities	0.098	(0.308)	-0.046	(0.301)	-0.994	(0.244)	0.189	(0.234)
Qld Inner Regional	-0.037	(0.310)	0.060	(0.327)	-1.564	(0.291)	-0.552	(0.286)
Qld Outer Regional	0.027	(0.279)	-0.157	(0.295)	-0.961	(0.210)	-0.112	(0.222)
Qld Remote	-0.127	(0.221)	-0.357	(0.239)	0.319	(0.149)	-0.208	(0.179)
WA Non-Remote	0.456	(0.211)	-0.090	(0.229)	-0.208	(0.154)	0.320	(0.171)
WA Remote	0.483	(0.206)	-0.374	(0.242)	0.134	(0.148)	0.372	(0.168)
NT Remote	-0.037	(0.215)	-0.367	(0.237)	-0.046	(0.148)	0.014	(0.172)
Other Non-remote	-0.031	(0.184)	-0.066	(0.186)	-0.694	(0.128)	0.172	(0.143)
Other Remote	0.357	(0.230)	-0.439	(0.285)	-0.082	(0.165)	-0.298	(0.203)
Difficulty speaking English	-0.286	(0.192)	-0.331	(0.336)	0.269	(0.145)	-0.417	(0.192)
Degree	-1.244	(0.284)	1.030	(0.194)	0.486	(0.129)	0.176	(0.151)
Other qualification	-0.384	(0.113)	0.768	(0.149)	0.397	(0.084)	0.307	(0.092)
Year 12	-0.878	(0.148)	1.051	(0.158)	0.057	(0.104)	0.105	(0.110)
Year 10 or 11	-0.287	(0.095)	0.524	(0.141)	0.229	(0.077)	0.030	(0.085)
Speaks Indigenous Language	0.151	(0.108)	0.059	(0.125)	0.230	(0.077)	0.109	(0.088)
Male	1.279	(0.082)	-0.471	(0.089)	-0.067	(0.058)	0.122	(0.064)
Constant	-2.585	(0.430)	0.637	(0.434)	-0.445	(0.307)	-0.923	(0.335)
Number of observations	6,449		6,449		6,449		6,449	

**Note:** Table population is Indigenous persons aged 18–64 years. The omitted category defines the base case—that is, a single female person without children who is currently unemployed, has less than Year 10 education, no post-school qualification, does not speak an Indigenous language, and lives in an Indigenous-only household (containing only one family) that is located in a major city in New South Wales.

**Source:** 2008 NATSISS data (accessed via ABS RADL).

**TABLE B3.** Logistic regression: financial stress, low household income, disability status and fair or poor health, 2008

	Financial Stress		Low household income		Disability		Fair or poor health	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
CDEP	-0.258	(0.148)	-1.091	(0.166)	0.084	(0.292)	-0.402	(0.181)
Non-CDEP employed	-1.030	(0.105)	-2.891	(0.127)	-0.449	(0.211)	-0.802	(0.123)
NILF	0.041	(0.108)	-0.206	(0.118)	1.015	(0.199)	0.413	(0.118)
Age	0.053	(0.015)	0.032	(0.020)	0.057	(0.026)	0.125	(0.018)
Age <sup>2</sup>	-0.001	(0.000)	0.000	(0.000)	-0.001	(0.000)	-0.001	(0.000)
Mixed household	-0.795	(0.073)	-0.657	(0.101)	0.201	(0.139)	0.012	(0.088)
Partner	-0.452	(0.091)	-0.649	(0.119)	0.078	(0.151)	-0.225	(0.099)
Kids	0.044	(0.091)	0.293	(0.111)	-0.530	(0.160)	-0.367	(0.102)
Partner*kids	0.260	(0.118)	0.270	(0.151)	0.079	(0.198)	0.173	(0.131)
Multi-family household	0.230	(0.090)	-0.650	(0.133)	0.121	(0.147)	0.074	(0.103)
Taken	0.294	(0.099)	0.242	(0.121)	0.638	(0.133)	0.455	(0.098)
NSW Inner Regional	-0.254	(0.183)	-0.140	(0.230)	-0.480	(0.322)	-0.084	(0.204)
NSW Outer Regional	-0.161	(0.196)	0.253	(0.241)	-1.339	(0.437)	0.017	(0.221)
Vic Total	-0.119	(0.138)	0.287	(0.176)	0.017	(0.223)	0.004	(0.154)
Qld Major Cities	-0.123	(0.230)	0.134	(0.298)	0.225	(0.369)	0.201	(0.249)
Qld Inner Regional	-0.336	(0.227)	-0.701	(0.292)	-1.228	(0.547)	-0.605	(0.281)
Qld Outer Regional	0.183	(0.194)	-0.340	(0.278)	-0.436	(0.376)	-0.159	(0.240)
Qld Remote	-0.080	(0.159)	-0.271	(0.196)	-0.428	(0.274)	-0.567	(0.189)
WA Non-Remote	-0.263	(0.165)	0.484	(0.204)	-0.128	(0.275)	-0.085	(0.182)
WA Remote	-0.141	(0.160)	0.187	(0.205)	-0.812	(0.305)	-0.111	(0.179)
NT Remote	-0.012	(0.159)	0.233	(0.196)	-0.366	(0.272)	-0.602	(0.184)
Other Non-remote	-0.415	(0.135)	0.006	(0.168)	0.086	(0.215)	0.119	(0.147)
Other Remote	0.236	(0.178)	0.271	(0.214)	-0.873	(0.323)	-0.408	(0.198)
Difficulty speaking English	0.677	(0.192)	0.659	(0.219)	0.831	(0.216)	-0.315	(0.190)
Degree	-1.024	(0.146)	-1.088	(0.222)	-0.522	(0.264)	-0.402	(0.154)
Other qualification	-0.479	(0.086)	-0.555	(0.109)	-0.309	(0.144)	-0.315	(0.093)
Year 12	-0.696	(0.103)	-0.384	(0.133)	-0.175	(0.188)	-0.416	(0.127)
Year 10 or 11	-0.284	(0.079)	-0.109	(0.094)	-0.145	(0.122)	-0.371	(0.084)
Speaks Indigenous language	0.301	(0.083)	0.194	(0.103)	0.093	(0.146)	0.007	(0.094)
Male	-0.036	(0.060)	0.150	(0.079)	0.023	(0.104)	0.134	(0.069)
Constant	0.521	(0.317)	0.459	(0.406)	-3.801	(0.566)	-3.540	(0.405)
Number of observations	6,449		6,449		6,449		6,449	

**Note:** Table population is Indigenous persons aged 18–64 years. The omitted category defines the base case—that is, a single female person without children who is currently unemployed, has less than Year 10 education, no post-school qualification, does not speak an Indigenous language, and lives in an Indigenous-only household (containing only one family) that is located in a major city in New South Wales.

**Source:** 2008 NATSISS data (accessed via ABS RADL).

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